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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/997,472	11/29/2001	Pradeep Trivedi	03226/139001; P6826	6172

7590 04/23/2003

Rosenthal & Osha, L.L.P.
Suite 4550
700 Louisiana
Houston, TX 77002

EXAMINER

NGUYEN, HAIL

ART UNIT	PAPER NUMBER
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2816

DATE MAILED: 04/23/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary

Application No.

09/997,472

Applicant(s)

TRIVEDI ET AL.

Examiner

Hai L. Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 March 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-19 and 23-27 is/are pending in the application.
- 4a) Of the above claim(s) 7-17 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 19 and 23-27 is/are allowed.
- 6) ☒ Claim(s) 1,4-6 and 18 is/are rejected.
- 7) ☒ Claim(s) 3 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 March 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Response to Amendment

1. The amendment received on 03/05/03 has been reviewed and considered with the following results:

Applicant's election without traverse of claims 1-6 and 18-27 Paper No. 9 is acknowledged; and the non-elected claims 7-17 have been withdrawn. However, Applicant's new amendment for canceling of non-elected claims 7-17 is required.

As to the objections to claims 2 and 20-22, Applicant's amendments have overcome the objections, as such; the objections have been withdrawn.

As to the prior art rejections to the claims, Applicant's arguments with respect to the prior art rejections are persuasive and, as such, the prior art rejections have been withdrawn. A new action on the merits appears below.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 4 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 4 is indefinite because the recited limitation "another lock status signal", on line 2, lacks antecedent basis since there is no other lock status signal.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in-

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or

(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

5. Claims 1, 4-6, and 18 are rejected under 35 U.S.C. 102(b) as being anticipated by Trodden (US 5,969,576).

With regard to claim 1, Trodden discloses Figs. 1-5 a circuit comprising a phase locked loop having a phase-frequency detector (20), wherein the phase frequency detector inputs a system clock (REF) and generates a chip clock (VCO), and wherein the phase-frequency detector generates pulses on a first signal (UP) and second signal (DN) dependent on a relationship between the system clock and the chip clock; and a lock detect indicator (100) that uses the first and second signals to determine whether the phase locked loop is out of lock.

With regard to claim 4, wherein the lock detect indicator comprises circuitry that outputs another lock status signal (LOCKD), wherein the lock status signal is indicative of whether the phase locked loop is out of lock (see column 6 line 44 through column 7 line 31).

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With regard to claim 5, the lock detect indicator comprises circuitry that outputs a past lock status signal (LOCKD), wherein the past lock status signal indicates whether the phase locked loop has been out of lock (see column 6 line 44 through column 7 line 31).

With regard to claim 6, the lock detect indicator comprises an inherent reset circuitry that resets the lock detect indicator dependent on a reset input signal (RESET_N).

Claim 18 is similarly rejected. Note the above discussion with regard to claim 1.

Allowable Subject Matter

6. Claims 19 and 23-27 are allowed.

7. Claim 3 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The prior art of record does not disclose or suggest a circuit, and a method of use thereof, as recited in claims 3 and 19, and specifically the limitation directed to the lock detect indicator (as shown in Fig. 4) comprises circuitry (50) that generates a first lock indication pulse (diff_pulse) if a pulse on the first signal (fast_pulse) or second signal (slow_pulse) is longer than a predetermined pulse width; circuitry (70, 80) that generates a second lock indication pulse (lock) dependent on the first lock indication pulse and a count value; and circuitry (90, 110) that uses the second lock indication pulse to dynamically generate a lock status signal, wherein the lock status signal (lock_status) is indicative of whether the phase locked loop is out of lock.

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Conclusion

8. In view of the new grounds of rejection, this action is non-final.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hai L. Nguyen whose telephone number is 703-306-9178 and Right Fax number is 703-746-3951. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Callahan can be reached on 703-308-4876. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9318 for regular communications and 703-872-9319 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

HLN
April 8, 2003

TIMOTHY P. CALLAHAN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800